

Louisiana Department of Environmental Quality (LDEQ) 2016 Triennial Revision Actions on Clean Water Act (CWA) 304(a) New and Updated Criteria Recommendations Published by the Environmental Protection Agency (EPA) since May 30, 2000

September 16, 2019

This document describes Louisiana's actions for all parameters having new or updated criteria recommendations published by the EPA since May 30, 2000 through the initiation of the 2016 triennial revision. All CWA 304(a) criteria recommendations were reviewed for the 2016 triennial revision. Data collected from the ambient surface water quality monitoring program (and other special water quality monitoring projects), and EPA criteria recommendation documents were used to inform the agency on actions for the 2016 triennial revision.

Criteria recommendations published after the initiation of the 2016 triennial revision were not considered in this review, including aluminum (2018) and cyanotoxins (2019). Criteria recommendations the agency will propose for adoption will be included in proposed rule WQ097. WQ097 is expected to be published for public review and comment in the Louisiana Register in Fall-Winter 2019.

Aquatic Life Criteria (ALC) Recommendations

Criteria Recommendations with Existing ALC

Substance	CAS #	Action
Cadmium	7440-43-9	LDEQ efforts to revise cadmium ALC are ongoing. Cadmium ALC recommendation was published by EPA in 2016. The agency is evaluating EPA's species recalculation procedure.
Copper	7440-50-8	LDEQ efforts to revise copper freshwater ALC are ongoing. Copper freshwater ALC recommendation was published by EPA in 2007. Use of the biotic ligand model (BLM) to develop site-specific criteria is proposed in WQ097; however, additional water quality monitoring data is needed to inform appropriate use of the model.

Criteria Recommendations without Existing ALC

Substance	CAS #	Action
Ammonia	7664-41-7	LDEQ efforts to develop ammonia freshwater ALC are complete. EPA published ammonia freshwater ALC in 2013. Ammonia freshwater ALC is proposed in WQ097.

Substance	CAS #	Action
Selenium	7782-49-2	LDEQ efforts to develop selenium freshwater ALC are ongoing. Selenium freshwater ALC recommendations were published by EPA in 2016. The agency is evaluating EPA's recommendations.
Nutrients	N/A	LDEQ efforts regarding nutrient criteria are ongoing. LDEQ is evaluating translators for the narrative nutrient criteria through determination of thresholds for inland rivers and streams, and inland lakes and reservoirs.
Acrolein	107-02-8	No action warranted for the 2016 triennial revision. Substances were not sampled by the agency from 2006 to 2016; insufficient data found from other water quality monitoring sources. HHC recommendations published by EPA for acrolein in 2009, carbaryl in 2012, diazinon and nonylphenol in 2005, and tributyltin in 2004. LDEQ will reevaluate criteria recommendations with next triennial revision.
Carbaryl	63-25-2	
Diazinon	333-41-5	
Nonylphenol	84852-15-3	
Tributyltin (TBT)	N/A	

Human Health Criteria (HHC) Recommendations

Criteria Recommendations with Existing HHC

Substance	CAS #	Action
Pathogen and Pathogen Indicators	N/A	LDEQ efforts to develop recreational water quality criteria related to pathogen and pathogen indicators were promulgated in 2016, through WQ092. EPA published recommendations in 2012.
Aldrin	309-00-2	LDEQ efforts to revise HHC are ongoing. The agency is evaluating EPA's recommended update to HHC methodology published in 2000; particularly the use of bioaccumulation factors in place of bioconcentration factors to derive HHC.
Arsenic	7440-38-2	
Benzene	71-43-2	
Benzidine	92-87-5	
Bromodichloromethane	75-27-4	
Bromoform (Tribromomethane)	75-25-2	
Cadmium	7440-43-9	
Carbon Tetrachloride (Tetrachloromethane)	56-23-5	
Chlordane	57-74-9	
Chloroform (Trichloromethane)	67-66-3	
2-Chlorophenol	95-57-8	

Substance	CAS #	Action
3-Chlorophenol	108-43-0	
4-Chlorophenol	106-48-9	
Chromium III	10025-73-7	
Chromium VI	18540-29-9	
Copper	7440-50-8	
Cyanide	57-12-5	
DDE	72-55-9	
DDT	50-29-3	
Dibromochloromethane	124-48-1	
1,2-Dichloroethane (EDC)	107-06-2	
1,1-Dichloroethylene	75-35-4	
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	
2,3-Dichlorophenol	576-24-9	
2,4-Dichlorophenol	120-83-2	
2,5-Dichlorophenol	583-78-8	
2,6-Dichlorophenol	87-65-0	
3,4-Dichlorophenol	95-77-2	
1,3-Dichloropropene	542-75-6	
Dieldrin	60-57-1	
Endosulfan	115-29-7	
Endrin	72-20-8	
Ethylbenzene	100-41-4	
Heptachlor	76-44-8	
Hexachlorobenzene	118-74-1	
Hexachlorobutadiene	87-68-3	
Hexachlorocyclohexane (gamma BHC; Lindane)	58-89-9	
Lead	7439-92-1	
Mercury	7439-97-6	
Methylene chloride (Dichloromethane)	75-09-2	
Phenol (Total)	108-95-2	
Polychlorinated Biphenyls, Total (PCB's)	1336-36-3	
TDE (DDD)	72-54-8	
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	1746-01-6	
1,1,2,2-Tetrachloroethane	79-34-5	
Tetrachloroethylene	127-18-4	
Toluene	108-88-3	
Toxaphene	8001-35-2	
1,1,1-Trichloroethane	71-55-6	
1,1,2-Trichloroethane	79-00-5	

Substance	CAS #	Action
Trichloroethylene	79-01-6	
2-(2,4,5-Trichlorophenoxy) propionic acid (2,4,5-TP; Silvex)	93-72-1	
Vinyl Chloride (Chloroethylene)	75-01-4	
Zinc	7440-66-6	

Criteria Recommendations without Existing HHC

Substance	CAS #	Action
Bis(2-Ethylexyl) Phthalate	117-81-7	The LDEQ is evaluating the development of Bis(2-ethylexyl) Phthalate HHC. HHC recommendation published by EPA in 2015. Nine detections of substance were measured in the Mississippi River from 2006 to 2016 at four monitoring sites. Effort to develop HHC for this substance will advance after completion of bioaccumulation factor evaluation.
Dimethyl Phthalate	131-11-3	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with one detection at a site on Mississippi River in June 2009. LDEQ will reevaluate criteria recommendation with next triennial revision.
Di-n-Butyl Phthalate	84-74-2	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with two detections on the same day at two Mississippi River sites in October 2008. LDEQ will reevaluate criteria recommendation with next triennial revision.
Endrin Aldehyde	7421-93-4	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with one detection in Mississippi River in November 2014. LDEQ will reevaluate criteria recommendation with next triennial revision.

Substance	CAS #	Action
Fluoranthene	206-44-0	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with one detection measured in an unnamed roadside ditch in August 2013. LDEQ will reevaluate criteria recommendation with next triennial revision.
Methyl Bromide	74-83-9	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with seven detections were observed at seven sites from August 2006 to October 2013. LDEQ will reevaluate criteria recommendation with next triennial revision.
1,2,4-Trichlorobenzene	120-82-1	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with one detection in the Mississippi River in September 2009. LDEQ will reevaluate criteria recommendation with next triennial revision.
1,2-Dichlorobenzene	95-50-1	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with three detections at three sites from March 2007 to October 2011. LDEQ will reevaluate criteria recommendation with next triennial revision.
1,2-Dichloropropane	78-87-5	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with two detections at two sites in April 2009 and June 2009. LDEQ will reevaluate criteria recommendation with next triennial revision.
1,3-Dichlorobenzene	541-73-1	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with one detection in the Ouachita River in July 2010. LDEQ will reevaluate criteria recommendation with next triennial revision.

Substance	CAS #	Action
1,4-Dichlorobenzene	106-46-7	No action warranted for the 2016 triennial revision. HHC recommendation published by EPA in 2015. Most results were non-detects from 2006 to 2016, with six detections at six sites from July 2006 to July 2010. LDEQ will reevaluate criteria recommendation with next triennial revision.
Acrolein	107-02-8	No action warranted for the 2016 triennial revision. Substances were not sampled by the agency from 2006 to 2016; insufficient data found from other water quality monitoring sources. HHC recommendations published by EPA for most substances in 2015; methylmercury in 2001, antimony, Nitrosodiethylamine, N, Nitrosodipyrrolidine, N, N-Nitrosodiphenylamine, and selenium in 2002 and thallium in 2003. LDEQ will reevaluate criteria recommendations with next triennial revision.
Acrylonitrile	107-13-1	
Antimony	7440-36-0	
Bis(Chloromethyl) Ether	542-88-1	
Dinitrophenols	25550-58-7	
Hexachlorocyclohexane (HCH)- Technical	608-73-1	
Methylmercury	22967-92-6	
Nitrosodiethylamine, N	55-18-5	
Nitrosopyrrolidine, N	930-55-2	
N-Nitrosodiphenylamine	86-30-6	
Selenium	7782-49-2	
Thallium	7440-28-0	
Acenaphthene	83-32-9	No action warranted for the 2016 triennial revision. All results were non-detects from 2006 to 2016; insufficient data found from other water quality monitoring sources. LDEQ will reevaluate criteria recommendations with next triennial revision.
alpha-Hexachlorocyclohexane (HCH)	319-84-6	
Anthracene	120-12-7	
Benzo(a)anthracene	56-55-3	
Benzo(a)pyrene	50-32-8	
Benzo(b)fluoranthene	205-99-2	
Benzo(k)fluoranthene	207-08-9	
beta-Hexachlorocyclohexane (HCH)	319-85-7	
Bis(2-Chloro-1-methylethyl) Ether	108-60-1	
Bis(2-Chloroethyl) Ether	111-44-4	
Butylbenzyl Phthalate	85-68-7	
Chlorobenzene	108-90-7	
Chrysene	218-01-9	
Dibenzo(a,h)anthracene	53-70-3	
Diethyl Phthalate	84-66-2	
Fluorene	86-73-7	
Heptachlor Epoxide	1024-57-3	
Hexachlorocyclopentadiene	77-47-4	
Hexachloroethane	67-72-1	

Substance	CAS #	Action
Indeno(1,2,3-cd)pyrene	193-39-5	
Isophorone	78-59-1	
Methoxychlor	72-43-5	
Nitrobenzene	98-95-3	
Nitrosodibutylamine, N	924-16-3	
N-Nitrosodimethylamine	62-75-9	
N-Nitrosodi-n-Propylamine	621-64-7	
Pentachlorobenzene	608-93-5	
Pentachlorophenol	87-86-5	
Pyrene	129-00-0	
1,2,4,5-Tetrachlorobenzene	95-94-3	
1,2-Diphenylhydrazine	122-66-7	
Trans-1,2-Dichloroethylene	156-60-5	
2,4,5-Trichlorophenol	95-95-4	
2,4,6-Trichlorophenol	88-06-2	
2,4-Dimethylphenol	105-67-9	
2,4-Dinitrotoluene	121-14-2	
2-Chloronaphthalene	91-58-7	
2-Methyl-4,6-Dinitrophenol	534-52-1	
3-3'-Dichlorobenzidine	91-94-1	
3-Methyl-4-Chlorophenol	59-50-7	